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HASHIMOTO MASAYUKI
HIZUKA JUNJI**(54) **REFORMING DEVICE**

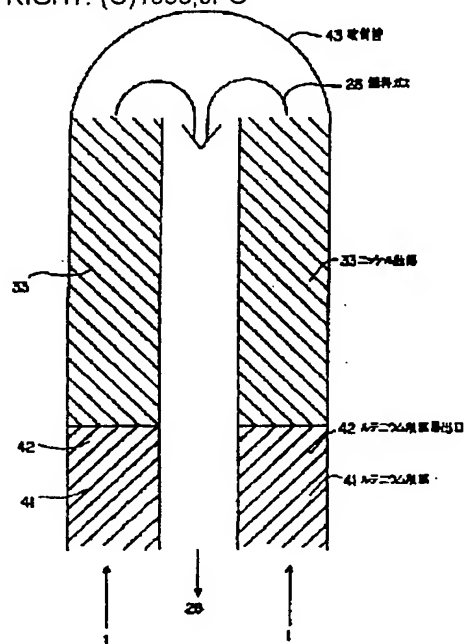
outlet 26 of the ruthenium catalysts attains 400 to 550°C.

(57) Abstract:

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PURPOSE: To prevent precipitation of carbon on catalysts even if the amt. of the steam to be used for steam reforming reaction is decreased by packing noble metal catalysts into the catalyst bed inlet parts of reforming pipes up to the prescribed height in a height direction and maintaining the parts corresponding to the outlets of the noble metal catalyst beds at a prescribed temp.

CONSTITUTION: Plural pieces of the reforming pipes internally packed with the catalysts beds for reforming are housed into a vessel. Reactive gases formed by mixing raw fuel and steam are introduced into the reforming pipes, and heating fluid, such as combustion gas, is introduced to the outer side of the reforming pipes to heat the reforming pipes, by which the reactive gases are made into gaseous fuel mainly composed of hydrogen. Fig. illustrates reforming device packed with two catalyst beds for a fuel battery power generation system. Ruthenium catalysts 41 are packed into the reforming pipe from its raw fuel inlet up to the height of 1/10 to 1/3 the height of the catalyst bed in the height direction of the reforming pipe and nickel catalysts 33 are packed thereon. Heating of the reforming pipe 23 is so controlled that the temp. at the



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